Modular Monitoring Safety Relays

Minotaur MSR245P



Description

The MSR245P is a display module for the modular Minotaur MSR200 family of monitoring safety relays. The MSR245P Display Module is interfaced to an MSR200 system through an MSR240P Communication Module, using the RS232 interface, with a two-core shielded cable. The display is refreshed approximately every six seconds.

Using the four-line LCD display and the three function key-switches, the configuration of external circuits, and the on-off status of all inputs of the system can be checked and interrogated.

The microprocessor, in the base module, scans all the inputs starting with the base module and working its way to the left. The first scanned input is "base module input 1". The last scanned input would be input 2 of the module furthest from the base module.

The display shows the lowest scanned input that de-energized the safety outputs (safety outputs open). After the lowest scanned input is cleared, the display will refresh and show the next input which is open. In this way, each open input circuit can be troubleshot and closed. When all inputs are closed, the user can scroll through the display.

The MSR245P requires 24V DC supply voltage. The power supply input as well as the RS232 are galvanically isolated from the MSR200 system, but can be connected non isolated if required.

Features

- Recalls and displays system information
- Simple menu selection
- Stores details of last registered stop occurrence Clearly readable backlit display
- Back-lit 4-line alphanumeric display
- RS232 interface

Specifications

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Standards	IEC/EN60204-1, ISOTR12100
Approvals	CE marked for all applicable directives
Power Supply	24V DC
Power Consumption	0.5W
Interface	RS232
Pollution Degree	2
Operating Temperature	-5°C to +55°C (+23°F to 131°F)
Humidity	90%RH
Enclosure Protection	IP40 (NEMA 1)
Terminal Protection	IP20
Conductor Size	0.2–2.5mm ² (24–14 AWG)
Torque Settings—terminal screws	0.4– 0.5Nm (3.54–4.43lb•in)
Mounting	Panel cut out or 35mm DIN rail (option)
Weight	250g (0.55lbs)
Vibration	10-55 Hz, 0.35mm
Shock	10g, 16ms, 100 shocks

Example Messages

Bold = standard text

Not Bold = text depending on function

System menu:

Manual/auto reset

Output active/deactivated

Monitoring active/device ready

EDM active/deactivated (feedback circuit)

Input configuration: Input Module 4 MSR220 emergency off

Input 1: 2-channel

Input 2: 1-channel

<u>Functions/Interruption messages</u>: <u>Input Module 4</u>

Input 2 causes interrupt

safety mats or cross-fault causes interrupt

transmission fault

fault EDM loop fault Y40 loop

malfunction

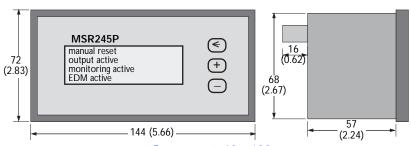
Output active/inactive



Product Selection

Description	Catalogue Number
Display Module	440R-H23184
DIN Rail Base Adaptor Kit	440R-H23185

Dimensions—mm (inches)



Front cut out: 68 x 138 Optional DIN rail mounting base EN 50022-35 x 7.5

Typical Wiring Diagram

